

Amendments to the Specification:

Please replace the first paragraph on page 4 under the heading "First Preferred Embodiment" with the following amended paragraph:

As seen in FIG. 2, spa 2 contains sensor 17 and spa piping 71. In a first preferred embodiment sensor 17 is mounted to mounting board 22 underneath spa skirt 20 near spa piping 71 of spa 2's piping, as shown in FIG. 6. This location is chosen so that sensor 17 is exposed to the air that is near the piping system of spa 2. In a preferred embodiment, spa controller 12 contains a CPU that is programmed to maintain the temperature of the water in spa tub 7 and the water in spa piping 71 spa 2's piping in an optimum operating range (i.e., below a level that is too hot for a user, but above the level which would cause freezing of the water in spa piping 71 spa 2's piping). As in the prior art, sensor 3 senses the temperature of the water in spa tub 7. Sensor 5 senses the temperature of water near water heater 9.

Please replace the last paragraph on page 4 with the following amended paragraph:

In the present invention, sensor 17 has been added to the system and senses the temperature of ambient air around spa piping 71 spa 2's piping. In the preferred embodiment of the present invention, sensor 17 is a HT Thermistor sensor (part no. Gecko: 530SB0016) manufactured by Ishicuka Electronic with offices in Japan.

Please replace the first paragraph on page 5 with the following amended paragraph:

In this first preferred embodiment, sensor 17 detects the true value of ambient air near spa piping 71 the piping of spa 2. The programming of spa controller 12 has been modified from spa controller 11 (FIG. 1) to include the ability to be able to utilize information reported by sensor 17 to better regulate the water temperature of spa 2 to prevent freezing of spa piping 71 its associated piping.

Please replace the first paragraph on page 5 under the heading "Second Preferred Embodiment" with the following amended paragraph:

A second preferred embodiment is seen by reference to FIGS. 3, 4 and 5. In the second preferred embodiment, sensor 17 is attached directly to printed circuit board (PCB) 12A inside spa controller 12, as shown in FIGS 4 and 5. In the second preferred embodiment, Spa controller 12 is model number SSPA, manufactured by Gecko Electronique with offices in Quebec City, Quebec, Canada. By attaching sensor 17 directly to PCB 12A, a substantial cost savings is realized in that the expense of mounting sensor 17 at another location near spa piping 71 spa 2's piping (as was shown in the first preferred embodiment) is avoided. In other words, when sensor 17 is mounted on PCB 12A, funds that would be spent on cabling, housing and connectors are saved. However, it should be noted that when sensor 17 is mounted to PCB 12A, sensor 17 is exposed not only to ambient air temperature, but also to the temperature of the area around PCB 12A which is heated by the other components also attached to PCB 12A. Hence, a correction factor needs to be programmed into spa controller 12 account for the heat generated by spa controller 12's components. Through experimentation for spa controller 12 model number SSPA, Applicants have determined the following correlation shown in Table 2:

TABLE 2

Temp at Sensor 17	Ambient Air Temp.	Conduct a 1 minute purge every:
68 deg. F	40 deg. F.	2 hours
59 deg. F	28 deg. F.	1 hour
54 deg. F	14 deg. F.	30 minutes
50 deg. F	5 deg. F.	15 minutes